— 6' —

Four Dollars per annum—Single Copies, Forty Cents.

VOL. II. No. 2. MAY 15th, 1877. WHOLE NO. 11.

Biological
& Medical
Serials

STORAGE

ARCHIVES

Canadian Journal of Med. Science,
107 Church St. Toronto, Canada

CLINICAL SURGERY.

A Periodical Devoted to Surgery in all its Special Departments,

EDWARD J. BERMINGHAM, M. D., EDITOR.

CONTENTS.

ORIGINAL PAPERS.

1.—A Lost Art in Surgery. By Alpheus B. Crosby, M. D., of New York....41
2.—Fibrous Tumor of the Uterus Expelled Piecemeal by Ergot. By Wm. H. Byford, M. D., of Chicago....64
3.—A Case of Salivary Calculus. By Rudolf Tauszky, M. D., of New York....67
4.—Fatal Cellulitis Following the Use of the Elastic Bandage. By Stephen Smith, M. D., of New York..70

HOSPITAL RECORDS.

ROOSEVELT HOSPITAL, NEW YORK.—REPORTED BY G. E. TWISS, M. D.

Exsection of Knee Joint. Service of Dr. Erskine Mason....72

BELLEVUE HOSPITAL, NEW YORK.

Osteo Sarcoma of Ilium—Removal of a Portion of the Tumor by the Galvano Cautery. Service of Dr. Stephen Smith....75

BIBLIOGRAPHY.

A Practical Treatise on Diseases of the Skin. By Louis A. Duhring, M. D....78
The Anatomy of the Head. By Thomas Dwight, M. D....79
A Course of Practical Histology. By E. A. Schafer....80

SUBSCRIPTION RATES,

(INCLUDING POSTAGE, AND PAYABLE INVARIABLY IN ADVANCE)

United States and Canada,	$4 00.	Great Britain and Ireland,	18s.
France,	23f.	Germany,	18m.

NEW YORK: RUTLEDGE & CO., PUBLISHERS, 102 W. FORTY-NINTH ST.

Entered according to the Act of Congress, in the year 1877, by RUTLEDGE & Co., in the Office of the Librarian of Congress, at Washington.

TO THE MEDICAL PROFESSION

The undersigned begs to invite attention to a new and elegant preparation of

COD LIVER OIL

with Wild Cherry Bark and the Hypophosphites of Lime and Soda. Each fluid ounce contains :

Pure Norwegian Cod Liver Oil, . . .	50 per cent.
Syrup Wild Cherry Bark, ...	25 "
Hypophosphite of Lime, ...	5 Grains.
Hypophosphite of Soda, ...	5 "

This emulsion contains nearly fifteen per cent. more oil than any other offered to the profession, and such is the care taken in its manufacture, that it will not decompose, or be percipitated by standing, as is so often the case. It is also elegantly flavored, and will be found to agree with the most delicate stomach.

In ordering, please specify "*Kress' Emuls. Ol. morrh. cum Pruni Virg.*"

Please inform your druggist that this preparation can be found at the wholesale houses of John F. Henry, Curran & Co., and Fraser & Lee.

HE ALSO KEEPS CONSTANTLY ON HAND A FULL LINE OF

REYNAL'S MEDICATED BOUGIES.

Chloride of Zinc and Belladonna,
Chloride of Zinc and Opium,
Sulphate of Zinc and Belladonna,
Sulphate of Zinc and Opium,
Sulpho-Carbolate of Zinc.
Sulphate of Zinc,
Tannin,
Ext. Rhatany,
Sulphate of Soda,
Chloride of Zinc,
Extract of Opium,

These Bougies have been extensively used in the treatment of blennorrhoea both acute and chronic, with the most gratifying results abroad, and are now introduced into this country.

FLUID EXTRACT OF DAMIANA,

A Powerful Aphrodisiac.

SUGAR COATED PILLS, COMPRESSED PILLS,
GELATINE COATED PILLS, MEDICINAL WAFERS,
AND ALL NEW PREPARATIONS.

ALL FOREIGN AND NATIVE, NATURAL AND ARTIFICIAL MINERAL WATERS CONSTANTLY ON HAND.

Prescriptions a Specialty.

PRESCRIPTIONS ACCURATELY PREPARED from the Purest Medicines and compounded at all hours of the day or night.

Orders sent to *any part* of the country.

OSCAR KRESS,
Analytical and Dispensing Chemist,
Cor. 52d Street & Broadway, N. Y.

ARCHIVES
OF
CLINICAL SURGERY.

VOL. II, No. 2. MAY, 1877. Whole No., 11.

ORIGINAL PAPERS.

A LOST ART IN SURGERY.*

BY
A. B. CROSBY, M. D.,
Professor of Anatomy, Bellevue Hospital Medical College.

It was the celebrated humorist, Charles Lamb, who said, on seeing a very dirty man, "If dirt were trumps, what hands you'd hold."

It must be confessed that man is a dirty animal ; and if by reason of water he improves upon his natural state, he deserves commendation therefore. It is true that mere attrition will separate from the surface of the body its effete matter and its worn-out covering—and so man may be in possession of respectable health in spite of his filth. But when we approach the domain of the surgeon, we find that cleanliness is the *sine qua non* of successful surgery.

Filth in wounds means poison, and poison means death. The most extended observation has established the above statement as an aphorism in surgery. I do not hesitate to affirm that, in the great metropolitan hospitals of the world, cleanliness, in the highest and best sense, is almost unknown. I trust that I shall not be deemed impertinent when I assert that perfect cleanliness is a lost art in surgery.

To indicate the way in which this lost art may be restored is the object of the present paper. My method will be historical. I propose to adduce certain clinical facts which have come under my observation at different times and in different places, and then deduce such inferences as these facts will seem to justify.

---

* This paper was read before the New York County Medical Society a year since, but its publication has been delayed until another year's experience in Bellevue Hospital might confirm its statements. A more extended observation has only reaffirmed its conclusions.

In the summer of 1861, being the first of our civil war, I was assigned as Division Surgeon to the staff of General Charles P. Stone, then commanding a corps of observation at Poolesville, Maryland. As we were thirty-six miles from Washington, and as the general hospitals in that city were at the time crude and unsatisfactory, I conceived the idea of establishing a Division Hospital on the ground, and so retain both our sick and wounded.

In August, 1861, I made a communication to Surgeon Charles A. Tripler, who was the Medical Director of the army at Washington, submitting my plan for the construction of a hospital, and asking for the necessary lumber, doors, windows, etc., with which to construct it. The plan was approved, my requisitions were endorsed, and the necessary materials furnished. Some enlisted men belonging to the 15th Massachusetts Volunteers, who were skilled carpenters, were detailed as builders, and on the 21st of October. the day on which the battle of Ball's Bluff took place, we were ready to receive the wounded from that ill-fated engagement.

This hospital was built essentially on what is now known as the pavilion plan, although I was at the time ignorant of the action which the Sanitary Commission was taking in the same direction. I have recently learned that the Sanitary Commission made a communication to the government in July, 1861, advocating the use of pavilion hospitals, and in October following—about the time my hospital was completed and occupied—secured an order for the construction of a hospital on the pavilion plan. I have given these details because from them it appears that my hospital was built and occupied before any of those suggested by the Sanitary Commission, and, so far as I know, was the first hospital of the kind erected during the war.

It consisted of a series of one story buildings, each large enough for a single ward of thirty beds. Each building was made of rough boards, the cracks being battened with strips, and all thoroughly white-washed, inside and out. There was a window at the head of each bed, suitable ventilators, which were always kept open, and a large stove in each ward. The kitchen and offices were in a building by themselves. All these buildings were connected by water sheds, without walls, so that each ward was distinct, and elevated walks were made beneath the sheds. The ground was elevated and dry, and as trenches were dug around each building to receive the droppings from the eaves, the drainage was perfect. The sinks were at a distance from the hospital, fresh earth being thrown daily over the dejections.

The condition of the wounded brought off from Ball's Bluff was at the outset unfavorable. They were all suffering under the depression of defeat. It was necessary to transport the sufferers from the Virginia shore to Harrison's Island, in the Potomac, on scows, where they received immediate attention. As an attack was apprehended at daybreak, the wounded were again moved to the Maryland shore. Some of them were then pushed across the Ohio and Chesapeake Canal, while others were moved by canal boats to Edward's Ferry—but all were obliged to endure several miles of transportation by ambulance over exceptionally rough, rocky roads, the matter being complicated by a heavy rain.

On arriving at the Division Hospital at Poolesville, a uniform plan of treatment was adopted. The sum and substance of the plan was absolute cleanliness. This was enforced by frequent scourings of the wards, and the instant removal of dejections and all effete matter from them. The bedding was changed as often as it was in the slightest degree soiled. A rough wash-house was extemporized, where four men incessantly boiled, washed, and ironed the bedding. The patients bodies were sponged with warm water—those suffering with surgical fever at short intervals.

At that period of the war the common dressing for gunshot wounds was lint, held in place by adhesive strips, by which the wound was soon hermetically sealed, the retention of sloughing tissue and the burroughing of pus being thereby favored. This "whited sepulchre" method of dressing was absolutely interdicted. Every injury was treated as an open wound. A water dressing was applied, which was changed at short intervals, and burned as soon as soiled. All wounds which were offensive were treated with antiseptic and stimulating applications. No wound was drawn together until its surfaces were covered with bright, healthy granulations.

All our patients were fed for the first few days on the richest soups, fresh milk and bread, supplemented afterwards by a thoroughly nutritious mixed diet. The wards were flooded with sunshine and pure air. All these regulations were rigidly enforced, the nurses soon learning that the guard house and starvation were the penalties for any direliction. Thus absolute cleanliness, nutritious food, and pure air formed the tripod on which our Division Hospital at Poolesville rested, and to which its excellent results were mainly attributable.

Fortunately, I am inclined to think, our requisitions for drugs remained unanswered, and we were obliged to content ourselves with a few pounds of copperas—a crude sulphate of iron—obtained at a country store, which, pulverized and mixed with molasses, answered admirably in cases where there was excessive suppuration. We had also opium, cinchona, Epsom salts, and whiskey.

Having thus summarized the history of this hospital, I shall as briefly summarize our results. The whole mortality, including those known to be mortally wounded on admission, and all cases in which operations were performed, both primary and secondary, as well as those where no operation was required, amounted to only ten per cent. Similar results have been attained with such a degree of uniformity in pavilion hospitals that many surgeons and sanitarians have been inclined to affirm that the old-time metropolitan hospitals cannot compete with them, and must therefore give place. It remains for us to see whether the position of these gentlemen is well taken.

The Third Surgical Division in Bellevue Hospital has had a remarkable history during the past eighteen months, which cannot fail to prove both suggestive and instructive. Prior to September, 1874, the four wards of this division were occupied by puerperal cases, and had become infected to such a frightful extent that the patients were all finally transferred to Pavilion Hospitals on Blackwell's Island. The records of the division during the last six months of its occupancy for lying-in purposes, show the following facts. My esteemed colleague, Prof. William T. Lusk, stated that from Jan. 1st to June 11th, 1874, inclusive, out of one hundred and sixty-six lying-in patients, there were thirty-one deaths. A large portion of the survivors suffered from chills, an elevated temperature, a frequent pulse, and abdominal tenderness. In June the patients were all transferred to Blackwell's Island. In September the infected wards were occupied by surgical cases. It was obvious that the puerperal epidemic had left the wards in an unsafe condition for the receipt of open wounds. Consequently, at the request of the commissioners, my colleague, Prof. Doremus, took charge of the disinfecting process. As the method of disinfecting large hospitals has generally been faulty, I take great pleasure in presenting the efficient course pursued in this instance. Under a recent date Dr. Doremus is kind enough to write as follows :

"In the Spring of 1875 the Commissioners of Charities and Corrections of this city requested me to disinfect the surgical wards in the North wing of Bellevue Hospital. In deciding what course to pursue I was influenced by the following considerations :

Although our knowledge of the products of human decomposition in various diseases is exceedingly limited, we have reasons for believing that they are complex substances, and that hydrogen is one of their essential elements, the compounds of carbon with oxygen or with sulphur being excepted. On this theory, by attacking these emanations, with an element possessed of superior affinities for hydrogen, we can break up these compounds and thus rob them of their virulence. Moreover, as many of these poisonous bodies are gaseous, they are readily absorbed by porous substances, and thus, walls, ceilings, as well as the furniture of hospital wards become magazines of pestilence. To attack these evil spirits successfully, gas must meet gas. Chlorine gas seemed to fulfill these conditions, and as it is easily made and comparatively inexpensive, I determined to test the efficacy of large volumes of said element. It is well known that this gas has an intense affinity for hydrogen. When these two gases are mingled in a flask of colorless glass or collodion and exposed to the bright sunlight or to the electric light, they unite with explosive violence,—even in diffused daylight they unite rapidly, forming hydrochloric acid. Water saturated with chlorine will decompose when placed in the sunbeam ; its hydrogen associates with the chlorine, and oxygen gas is set free. When chlorine is presented to sulphureted hydrogen immediate decomposition of the ill odored gas takes place—the superior affinity of the chlorine for the hydrogen causes the sulphur to be deposited in fine, yellow particles, and the doubtful (egg) flavor disappears. If chlorine and arseniureted hydrogen are put together, hydrochloric acid is again formed, arsenic is deposited and this most poisonous gas is rendered inert. One of the lecture experiments at the Bellevue Medical College, is to displace a portion of water in a tall glass jar, with sulphuretted hydrogen gas over the pneumatic trough and another portion of the water with arseniureted hydrogen ; on passing up a few bubbles of chlorine, chemical action occurs ; the *yellow tersulphide of arsenic* is seen on the sides of the jar and on the surface of the water, owing to the abstraction of the hydrogen by the said chlorine and the releasing of the sulphur and the arsenic in the nascent state. When a paper saturated with oil of turpentine is placed in a jar of chlorine gas, black clouds of carbon appear, accompanied with a dull, red flame, because of the intense affinity of this electro-negative element for the hydrogen of the carbureted hydrogen vapor. The potency of chlorine as a bleaching agent, is doubtless due to its ability to abstract the hydrogen from the coloring principles, either directly or indirectly, by liberating active oxygen from water. In this bleaching process care has to be taken lest the tissue be destroyed : as a rule, bleached goods have less strength than unbleached ones.

Many years since Faraday demonstrated that vaccine virus could be decomposed and thus deprived of its extraordinary powers by the agency of chloride. These few facts demonstrate that we understand the modus operandi of this deodorizing and disinfecting element. I refrain from mentioning others lest I prove tedious. Moisture is requisite in order that chlorine prove effective—although all substances contain more or less of water, I determined to fill each ward of the hospital with steam prior to charging it with chlorine. To check the loss of a portion of the gas, through crevices and other apertures, strips of paper were pasted around the windows and doors.

Some ten years ago, at the request of Prof. Lewis A. Sayre, Health Physician to this city, and of Mayor Gunther, with the co-operation of Dr. Swinburne, Health Officer of the Port of New York, I undertook the disinfection of certain cholera ships. In employing chlorine as one of the purifying agents, I found sheets of lead were most convenient as receptacles for the chemicals used in generating this gas. I turned up an edge of about six inches, after rolling out several feet of the lead, and in these troughs placed the materials, such as the peroxide of manganese and hydrochloric acid, or common salt, manganese and sulphuric acid, I therefore used similar leaden troughs at Bellevue, in which I placed a mixture of peroxide of manganese, common salt, (chloride of sodium) and water, stirring the mass with wooden shovels.

Vessels of sulphuric acid (pots de chambre) were placed around said long troughs ; the floors of the wards were wetted ; steam was turned on until the walls and ceilings were thoroughly moistened, and with four or five assistants we groped our way through the cloudy atmosphere, applied the doses of acid and hastened out of the rooms, twenty-four hours later a second application of acid was made, after stirring the mixtures the wards were again closed for twenty-four hours, and in some instances the gas was allowed thirty-six hours of additional treatment. The windows were then thrown open ; the floors and walls were scrubbed and dried. This ended the purification.

To disinfect the water closets a mixture of about equal weights of manganate of soda and sulphate of magnesia (Epsom salts) was sprinkled in and around the basins at night. In the reaction of these salts the permanganate of soda is one of the products. The ozone liberated effectively deodorized and disinfected the water closets and the discharge pipes. Between two and three tons of chlorine gas were generated in disinfecting the aforesaid surgical wards. Two hundred pounds of the mixture of manganate of soda and sulphate of magnesia were used in the water closets.

Vive la Chimie !"

After this thorough disinfection by Dr. Doremus, my distinguished colleague, Dr. James R. Wood, took charge of these four wards, which now constitute the "Third Surgical Division." In the absence of Dr. Crane, one of the surgeons of this division, Dr. Wood has rendered the greater portion of the surgical service since September, 1874, and his results have been so exceptionally good that I have deemed it best to quote him directly with reference to the precautions which he instituted on occupying the wards. I am indebted to Dr. Wood, who writes as follows :

"Having chosen the third floor of the North wing of the hospital for my division, I determined, notwithstanding the wards having been used previously for the lying-in service, to prevent if possible the reappearance of any septic diseases. Wishing to begin under the most favorable of hygienic influences, I directed that all the straw in the beds in the wards should be burned, and the ticks should be well washed in carbolic acid. The bedsteads were also sprinkled and washed in the same material, and then painted. The floors were thoroughly saturated with carbolic acid, and then scrubbed. The walls also were washed repeatedly with acid water and painted, in order to make the disinfection as complete as possible. Prof. Doremus was requested to generate immense quantities of chlorine gas in the wards, which was accomplished thoroughly. I then gave orders to my staff that under no circumstances should any case of erysipelas, cellulitis, gangrene, ulcers, or burns enter any of the wards. Should any of the above diseases enter the wards without the knowledge of the House Surgeon, he should, on becoming acquainted with the facts, immediately transfer the case to the Pavilion, and have the bed and bedding removed from the ward at once, and thoroughly washed and disinfected. I further ordered that no sponges should be used in the wards, and sheet lint and oakum be used in their places. Balsam Peru was ordered to be placed over wounds, and, in order to prevent the spread of disease by this means, it was decided that each patient should have a separate bottle of balsam, and that brushes should not be used more than once.

The House Surgeon and assistants were directed to take precautions to wash their hands and instrunents in carbolized water after dressing unhealthy wounds, and the orderlies and nurses were ordered to keep the patients and beds perfectly clean, and to look after the thorough disinfection of the water closets daily. It was further directed that all wounds, especially amputations, should be irrigated several times daily with carbolic acid water and smeared with balsam Peru, the wounded part being placed on a pillow of oakum, in such a position that drainage should be perfect. Since the wards were occupied for surgical purposes, some eighteen months ago, so perfect have been the disinfective and sanitary regulations, that there has not been, during my service, a single case of pyemia, and only two cases of erysipelas, both occurring where cancerous tumors had been removed."

As I have the honor of being associated with Dr. Wood as one of the surgeons of this division, being at present on duty, I have taken great pains to carry out his suggestions. The results continue to be exceedingly satisfactory, not only in surgical cases where operations have been done, but in a class of compound comminuted fractures, with extensive laceration of the soft parts, which are generally regarded by surgeons as imperatively demanding amputation. In this connection I might quote several cases, the records of which I have, but I will not trespass on the patience of the Society at this time.

In view of the puerperal infection and the grave mortality that were present in these wards during the first half of 1874, I propose to bring

AMPUTATION

NO.	NAME	AGE	SEX	DISEASE	DATE OF OPERATION	LOCATION
1	L. H.	20	M.	Extensive Necrosis of femur of three years standing.	Jan. 23, 1875.	Middle 3d
2	L. D.	25	M.	Compound comminuted fracture of the femur, involving knee-joint.	Sep. 16, 1875.	Upper 3d

AMPUTATION

1	R. W.	45	F.	Comminuted fracture of leg, with compound dislocation of ankle-joint. Tibia resected nine months, resulting in a deformed and useless leg.	Oct. 2, 1875.	

AMPUTATION

1	E. K.	45	M.	Compo. fracture of leg, with extensive comminution of both bones.	Oct. 22, 1874.	Upper 3d
2	M M.	30	M.	Compound fracture of leg, with extensive laceration of soft parts.	Jan. 16, 1875.	Middle 3d
3	P. E.	33	M.	Compound comminuted fracture of leg.	March 24, 1875.	Middle 3d
4	P. G.	40	M.	Compound dislocation of ankle.	March 24, 1875.	Lower 3d
5	A. M.	34	M.	Compound comminuted fracture of leg, involving ankle joint, together with rupture of anterior tibial artery.	Oct. 16, 1875.	Middle 3d
6	T. M.	12	M.	Compound fracture and dislocation of metatarsal bones.	Nov. 13, 1875.	Lower 3d
7	M. Q.	20	F.	Compound fracture of leg, with extensive laceration of soft parts.	Dec. 2, 1875.	Upper 3d
8	O. D.	34	M.	Compound comminuted fracture of leg.	Jan. 12, 1876.	Upper 3d

AMPUTATION

1	J. A.	32	M.	Necrosis of tarsal bones.	Oct. 10, 1874.	

OF THIGH.

METHOD OF OPERATING	RESULT	HIGHEST TEMP.	PULSE	TREATMENT AND REMARKS.
Lateral posterior flap.	Recovery	10th day, 102½	110	Closed for three days then opened. Ligature away on 10th day. No erysipelas.
Lateral Skin flap	Recovery	11th day, 103	108	Ligature away on 20th day. No erysipelas. Small slough on inner flap due to contusion of soft parts. Openly. Irrigation and balsam.

OF KNEE-JOINT.

Lateral skin flap. Patella remaining.	Recovery	4th day, 102½	106	Ligatures away on 19th day. No erysipelas. No abscess. Openly. Irrigation and balsam.

OF LEG.

Lateral skin flap.	Recovery	3d day, 103½	112	Ligatures away on 20th day. Openly. Irrigation and balsam.
Circular, with lateral incisions.	Recovery	19th day, 102½	94	Ligatures away on 19th day. Small abscess on spine of tibia. Openly. Irrigation and balsam.
Lateral skin flap.	Recovery	2d day, 103	144	No abscess. Openly. Irrigation and balsam.
Lateral skin flap.	Recovery	29th day, 106½	120	Chill. Abscess over tibia. Closed for a few days, then reopened. Irrigation and balsam after opening.
Lateral skin flaps.	Recovery	6th day, 102½	124	Ligatures away on 14th day. No abscess. No erysipelas. Openly. Irrigation and balsam.
Lateral skin flaps.	Recovery	3d day, 101½	124	Ligatures away on 9th day. No abscess. No erysipelas. Openly. Irrigation and balsam.
Lateral skin flaps.	Recovery	5th day, 102½	114	Ligatures away on 8th day. No abscess. No erysipelas. Openly. Irrigation and balsam.
Lateral skin flap.	Recovery	3d day, 102½	140	No erysipelas. Small abscess. Openly. Irrigation and balsam.

AT ANKLE-JOINT.

Syme's.	Recovery	3d day, 101½	120	Stump was closed. Small abscess and slight sloughing.

AMPUTATION

NO.	NAME	AGE	SEX	DISEASE.	DATE OF OPERATION.	LOCATION.
1	J. H.	15	M.	Lacerated wound of foot, with compound dislocation of first phalanx of great toe. Plantar surface extensively torn up.	June 9, 1875.	
2	J. M.	27	M.	Lacerated wound of foot, with dislocation of first metatarsal bone. Comminution of Phalanges. Plantar surface extensively torn up.	Jan. 11, 1876.	

AMPUTATION

1	J. G.	28	M.	Compound comminuted fracture of fore-arm, involving elbow-joint.	March 29, 1875.	Middle 3d

AMPUTATION

1	J. K.	22	M.	Lacerated wound of hand, requiring removal of 2, 3, 4, 5 fingers.	Dec. 19, 1874.	
2	J. D.	13	M.	Lacerated wound of hand, requiring amputation of all the fingers through middle of metacorpus.	June 3, 1875.	
3	T. B.	12	M.	Lacerated wound of hand, requiring amputation of 4th and 5th fingers at carpo-metacarpal articulation.	July 5, 1875.	

RADICAL CURE

1	R. G.	61	M.	Oblique inguinal.	Dec. 5, 1874.	Right side
2	R. C.	60	M.	Oblique inguinal.	Feb. 13, 1875.	Left side
3	C. I.	40	M.	Oblique inguinal.	Feb. 13, 1875.	Left side
4	M. B.	28	M.	Oblique inguinal.	Oct. 30, 1875.	Left side
5	J. K.	30	M.	Oblique inguinal.	Nov. 20, 1875.	Left side
6	J. H.	27	M.	Oblique inguinal.	Nov. 20, 1875.	Right side
7	J. D.	52	M.	Oblique inguinal.	April, 1876.	Left side

OF TOES.

METHOD OF OPERATING	RESULT	HIGHEST TEMP.	PULSE	TREATMENT AND REMARKS
	Recovery			Abdominal decubitus for drainage Irrigation, balsam and oakum.
	Recovery	2d day, 102		No Erysipelas. No Abscess. Abdominal decubitus. Irrigation, balsam and oakum.

OF ARM.

Lateral skin flap.	Recovery	2d day, 102½	120	No erysipelas, abscess or sloughing. Open. Irrigation and balsam.

OF FINGERS.

	Recovery	5th day, 101 1-5		Slight erysipelas on 7th day. Balsam and oakum dressing.
Palmar flap.	Recovery	Normal		Openly. Balsam and oakum dressing. No erysipelas, abscess or sloughing.
	Recovery			Slight erysipelas on 12th day. Small abscess opened on 14th day. Balsam and oakum dressing.

OF HERNIA.

Seton wet in subsulphate of iron.	Recovery	4th day, 100½		No peritonitis. Opium.
Wutzer's.	Recovery	4th day, 99½	80	No peritonitis. Opium.
Seton wet in subsulphate of iron.	Recovery			No peritonitis. Opium.
Wutzer's.	Recovery	2d day, 100		No peritonitis. Opium.
Wutzer's.	Recovery	8th day, 103		No peritonitis. Opium.
Seton wet in subsulphate of iron.	Recovery	7th day, 103		No peritonitis. Opium.
Agnew's.	Recovery	6th day, 100 1-6	76	No peritonitis. Opium.

STRANGULATED

NO.	NAME	AGE	SEX	DISEASE.	DATE OF OPERATION.	LOCATION
1	T. L.	37	M.	Oblique inguinal. 20 years' standing.	Dec. 3, 1874.	Right side
2	J. P.	47	M.	Oblique inguinal. 8 years' standing.	Dec. 7, 1874.	Right side
3	C. T.	40	M.	Oblique inguinal.	Sept. 2, 1874.	Right side
4	S. R.	37	M.	Congenital.	Sept. 13, 1875.	Left side

AMPUTATION

1	K. D.	40	F.	Schirrus cancer.	Oct. 10, 1874.	Right side
2	M. C.	38	F.	Schirrus cancer.	Oct. 31, 1874.	Right side
3	E. F.	47	F.	Schirrus cancer.	Nov. 6, 1875.	Left side
4	S. C.	55	F.	Schirrus cancer.	Nov. 13, 1875.	Right side
5	K. C.	30	F.	Schirrus cancer.	Jan. 2, 1876.	Right side
6	D. B.	44	F.	Schirrus cancer.	March 11, 1876.	Left side
7	K. T.	17	F.	Fibro sarcoma benign.	March 28, 1876.	Left side
8	M. C.	39	F.	Schirrus cancer.	April 13, 1876.	Right side

HERNIA.

METHOD OF OPERATING.	RESULT	HIGHEST TEMP.	PULSE	TREATMENT AND REMARKS.
Sac not opened.	Died	12th day, 100 1-8	96	Signs of strangulation had existed for several days before admission. Abscess. Artificial anus. Patient died of exhaustion two months after operation.
Sac opened.	Died	6th day, 101½	100	Complete strangulation of 24 hours' standing. Abdomen tender and tympanitic on admission. Died 8th day of peritonitis.
Sac opened.	Died			Strangulation of two days duration. Marked peritonitis on admission. The gut was gangrenous, became ruptured, and was not reduced. Died two days after operation.
Sac opened.	Died	3d day, 104		Strangulation of 10 hours' duration. Died on 17th day of acute uræmia. External wound healed, and internal abdominal ring completely closed. No peritonitis.

OF BREAST.

	Died			Erysipelas invaded the wound on the 10th day, and gradually extended until the arm and back were involved. An abscess in the axilla was opened on the 11th day, and on the 4th of Nov. diarrhœa set in, which resisted all treatment. Patient died of exhaustion. Patient was removed to a medical ward.
	Recovery			No erysipelas.
	Recovery	3d day, 101 1-5	96	No erysipelas.
	Recovery			No erysipelas.
	Recovery	2d day, 102 1-4	112	No erysipelas.
	Recovery	2d day, 101	112	No erysipelas.
	Recovery	3d day, 101	86	No erysipelas.
	Recovery	3d day, 101	112	No erysipelas.

TREPH

NO.	NAME	AGE	SEX	DISEASE.	DATE OF OPERATION	LOCATION
1	J. P.	47	M.	Comp. com. fracture of frontal bone.	Dec. 3, 1874.	Right side
2	F. R.	9	M.	Comp. depressed fracture of frontal bone.	Jan. 5, 1875.	Right side
3	A. G.	16	M.	Pistol shot wound. Parietal bone.	July 1, 1875.	Right side
4	J. R.	34	M.	Comp. depressed fracture of parietal bone. Base of skull involved in fracture.	Nov. 17, 1875	Left side
5	A. S.	50	M.	Comp. com. depressed fracture of frontal bone, and fracture of base.	March 4, 1876.	Right side
6	A. L.	5	F.	Pistol shot wound of frontal bone.	Aug. 7, 1875.	Right side
7	J. P.	50	M.	Syphilitic necrosis of parietal bone.	Nov. 21, 1875. *	Right side

EXTERNAL PERINEAL

NO.	NAME	AGE	SEX	DISEASE.	DATE OF OPERATION	LOCATION
1	W. H.	34	M.	Stricture of urethra. Perineum infiltrated. Bladder greatly distended.	Feb. 26, 1875.	
2	W. C.	20	M.	Tight stricture of urethra, complicated with fistula.	Dec. 11, 1875.	
3			M.	Tight stricture of urethra.	Dec. 11, 1875.	

INING.

METHOD OF OPERATING	RESULT	HIGHEST TEMP.	PULSE	TREATMENT AND REMARKS.
	Died			Hemorrhage from nose. Severe shock. Fragments elevated and removed. Patient never rallied. Died 20 hours after.
	Recovery	5th day, 107	108	Membranes not injured. Fragments elevated and removed. Out of bed on 24th day. No meningitis.
	Died	12th day, 105½	135	Membranes and cerebral tissue lacerated. Meningitis began on 5th day. Hernia cerebri appeared within 6 days. Died 14th day.
	Died	8th day, 103	96	Membranes not lacerated. Meningitis 20th day. Softening. Died 41 days after operation.
	Died	2d day, 107		Hemorrhage from nose. Cerebral tissue lost. Died 2d day.
	Recovery	105	160	Slight shock. Fragments removed at a depth of 1 inch. 3 drachms of brain tissue lost. Ball probed for at depth of 2½ ins.; not found. Hemiplegia appeared on 21st day. Hernia appeared on 10th day: increased for 3 months; then, under use of permanganate of potash for 2 months disappeared. 19th day sanious discharge from patient's ear.
	Died	2d day, 103	120	Necrosed portion removed by an elevator. Hemiplegia 8th day. Died 11th day. Meningitis and cerebral abscess.

URETHOTOMY.

Without a guide.	Died			No instrument could be introduced into the bladder. Patient died 6 days after of peritonitis. Post mortem revealed extensive infiltration under parietal layer of peritoneum.
With a guide.	Recovery	3d day, 103½		No catheter introduced to keep urethra open. Sounds introduced after 2d day. No erysipelas or abscess. When discharged patient passed a good stream.
With a guide.	Died			Wound closed. Patient was attacked within 24 hours after operation with acute œdema and congestion of lungs. Post mortem revealed fatty degeneration of heart.

NASAL

NO.	NAME	AGE	SEX	DISEASE	DATE OF OPERATION	LOCATION
1	W. A.	22	M.	Nasal polypus, involving antrum and nasal cavity; projecting through anterior nares in front, and pressing down the velum pendulum palati behind.	Jan. 23, 1876.	Right side

EXCISION

1	F. S.	17	M.	Necrosis of fibula.	Jan 22, 1876.	Right side

LITHO

1	T. P.	55	M.	Stone in bladder.	Oct. 13. 1874.	Bidateral

REMOVAL OF

1	R. W.	45	M.	Cancer of inferior maxilla.	Oct. 17, 1874.	Right side

RESEC

1	S. J.	21	F.	Caries of elbow-joint.	May 28, 1875.	Right side
2	J. W.	29	M.	Caries of knee-joint.	Oct. 9, 1875.	Right side

POLYPUS.

METHOD OF OPERATING.	RESULT	HIGHEST TEMP.	PULSE	TREATMENT AND REMARKS
	Recovery	2d day, 102$\frac{3}{4}$	110	Had been removed from antrum once before. The tumor was torn from cribriform plate of ethmoid bone, and liq. ferri subsulphatis applied daily to raw surface until April 1, when he was discharged cured.

OF FIBULA.

	Recovery	2d day, 102$\frac{1}{2}$		The thickened periosteum was elevated, and the entire fibula removed, except the head and malleolus. Wound was dressed with lint and balsam. Patient was discharged the middle of April with a new fibula.

TOMY.

	Died			Small amount of blood lost. Reacted well. Died 30 hours after operation of acute uremia. Post mortem revealed acute and chronic diffuse nephritis, with extensive cystic degeneration.

INFERIOR MAXILLA.

	Died	2d day, 102$\frac{3}{4}$		Difficulty of breathing 7th day. Laryngotomy. Extensive erysipelas set in on 10th day, and patient died of exhaustion 14 days after operation.

TIONS.

	Recovery	2d day, 103$\frac{1}{4}$	104	The exsection was sub-periosteal. The articular surfaces were removed, and the wound allowed to remain open. Went to garden 18th day. No erysipelas. Patient has almost perfect use of elbow.
Anterior flap. Patella left.	Recovery	10th day, 103	120	No erysipelas. Patient was walking with a posterior splint 10 months after the operation.

out in contrast the surgical results obtained in the same wards since September, 1874. My House Surgeon, Dr. H. M. Silver, whom I especially desire to commend for his efficient and conscientious discharge of duty, has, at my request, tabulated, from the reports of the division, a history of the surgical cases in which operations have been done since the disinfection of the wards and the establishment of absolute cleanliness, and the results of the same.

From this table it appears there were two amputations of the thigh high up, both of which recovered. The average temperature was 102¾ ; pulse, 110. No abscess or erysipelas appeared in either case. One was treated openly, and the other in the same way after the first two days. There was an amputation at the knee-joint that had little more disturbance than a simple amputation of a finger. The highest temperature was 102½ ; pulse, 106 ; no erysipelas, no abscess, and the patient made a rapid recovery. There were eight cases of amputation of the leg, all of which recovered. They were all treated openly, except one in which the temperature was up to 106½ ; the average temperature was 103¾. In only two cases did abscesses form, and they were very small. No erysipelas occurred in any of the stumps. There were two amputations of the toes, with extensive laceration of the plantar surface of the foot. There was little or no constitutional disturbance, the drainage being perfect, and recovery rapid. There was one amputation of the arm, followed by recovery. The temperature was 102½ ; pulse, 120 ; but no erysipelas, abscess, nor sloughing. There were three cases of amputation of several fingers, involving either the carpus or metacarpus, all of which recovered without constitutional disturbance. Thus it appears there were seventeen consecutive amputations, twelve major and five minor, *all* of which recovered. These results are most encouraging when we contrast them with the statistics of mortality of Sir James Y. Simpson, as derived from a record of five thousand amputations.

The table further shows that there were seven operations for the radical cure of hernia, all of which recovered. There was no peritonitis in these cases, and all were treated with opium. There were four operations for strangulated hernia. Three of the cases had peritonitis when admitted, and all died within a few days. The fourth case recovered from the hernia, but died subsequently from uraemia.

There were eight amputations of the breast. Seven recovered with slight disturbance ; the remaining one died from erysipelas and exhaustion. There were seven cases of trephining. Two recovered ; five died from meningitis, and were suffering from compression on admission.

There were three cases of external perineal urethrotomy. One recovered, two died: one from extensive urinary infiltration, and the other from acute œdema and congestion of the lungs. There was an operation for the removal of the superior maxilla, and one for the excision of the fibula, both of which recovered with low temperature. There was a case of lithotomy which died of acute uræmia thirty hours after the operation, and an operation for the removal of the inferior maxilla, which died from erysipelas. Finally there were two resections—one of the knee and one of the elbow—both of which recovered, the temperature not going above 103.

From the foregoing results it appears that sepsis has gained no habitat in these wards since they were disinfected, and since absolute cleanliness has been enforced.

In addition to these cases under the service of Dr. Wood, I have added an amputation in the upper third of the thigh, a radical operation for hernia, and a range of compound injuries, all of which have recovered.

But I am able to adduce still further evidence, derived from another quarter, but showing the same facts. In the Long Island College Hospital, of which I formerly had the honor of being one of the surgeons, the surgical wards became infected, and the history of the infection, together with its removal, is, to my mind, extremely significant. My friend and former colleague, Professor Jarvis S. Wight, at my request, has kindly furnished me the following statement. He writes:

"During the spring of 1873 pyemia and septicemia prevailed in the Long Island College Hospital. I was requested to disinfect the surgical wards. The following plan was submitted to and approved by the committee and carried out under my personal supervision, viz.: Some of the bedding and appliances was burned, while the rest was thoroughly washed in a strong solution of crude carbolic acid. The floors and walls of the ward were washed with the same carbolic solution, and then the wards were fumigated for three days with the vapor of carbolic acid and vinegar, and after that fully ventilated. When the patients were put into the ward again, pyemia and septicemia continued.

"Later in the season I came on duty in the surgical wards, and found pyemia and septicemia still prevailing. I said to myself, what can I do to eradicate this great trouble? I remembered the things that had been done, and then thought of the things that had not been done, and found I had overlooked the surgeon, the interne, the nurse and the patient; and for the first time realized that I had used an antiseptic instead of a disinfectant. I had preserved the proto-mycete and not destroyed it.

"Now remembering the well known affinity of chlorine for the hydrogen of infection and sepsis, I procured a bottle of chlorinated soda and washed my hands in it; then instructed the interne to do the same thing. The nurses were ordered to wash their hands in a solution of chlorinated soda both before and after dressing each wound. The wounds were washed with a weak solution of chlorine, and lightly dressed with sweet oil or carbolized oil, or at times with a little oakum. The *hands* of the *surgeon*, the *interne* and the *nurses* were *kept clean*. *Clean* hands, *clean* wounds, *clean* sponges, *clean* dressings, and *clean everything* were the order of the day. Disinfection and cleanliness were scrupulously observed before, during, and after operations.

"In two weeks' time there was a marked diminution of infection and sepsis, and in little more time it was the remarkable result that the foe had gone to parts unknown, and has never returned, for from that day to this a bottle of liquor sodae chlorinatae stands upon the table of each surgical ward, ready for constant and daily use, a standing monument over the grave of proto-mycete.

"I often think of what I did to banish pyemia and septicemia, and how I failed; and I also think of what more I did, and am gratified by the remarkable results. And now will it turn out, after all the agitation, that tents are no better than large hospitals well provided with sunlight, fresh air, disinfection and cleanliness? Of a truth wisdom is a tardy guest."

Such facts as these plead with mute eloquence for the restoration to surgery of the lost art of *absolute cleanliness*. It is not enough that the ward and bed are clean, but, in the language of Prof. Wight, we mnst have 'clean everything.'

Prof. Lusk, who observed the puerperal epidemic at Bellevue, was of the opinion that the transmission of the disease was through the attendants. I am aware that some may aver that puerperal fever can not be eradicated from wards once infected. Dr. Lusk, in an admirable paper entitled "The Genesis of an Epidemic of Puerperal Fever," has given a summary of the labors of Winckel in the lying-in institution of Dresden, which shows conclusively that *absolute* cleanliness may even here be king. In writing of this institution Dr. Lusk says:

"In the year 1872 there were 991 confinements and 52 deaths., a rate somewhat exceeding 5 per cent. During the first nine months the death rate was 6.5 per cent, whereas it fell in the succeeding three months to 2.8 per cent. This favorable change was not due to the workings of a special grace, but to the energetic measures inaugurated by Winckel.

who assumed the control in October, 1872. These measures were in substance as follows: The locality of the confinement ward was changed. Every patient was continued upon the bed in which she was confined. When removed to an adjoining ward the bed was transported with her. Each ward containing puerperal patients was emptied once a year, and kept vacated from three to four weeks. A distant wing of the hospital was set apart for erysipelatous and other cases requiring to be separated from those who were in a normal state. An additional nurse relieved the midwife in attendance upon confinement cases from all charge of the puerperal patients. To determine the carriers of infection, only one female pupil at a time was allowed to take charge of the confinements. So soon as a single case of fever occurred among the patients delivered by her, she was at once prevented from examining either pregnant or parturient women. Similar regulations were enforced in the case of the medical attendants.

"In the year 1873 the month of January began badly. From the 1st to the 9th inclusive 26 patients were confined. All without exception were taken ill, and five, or 19 per cent., died. This formidable state of affairs was coincident with a change in the staff of nurses; whereupon the following additional orders were issued: Examinations of parturient women to be forbidden to all those who had previously been in the habit of making them. Removal of the midwife in charge of the labor cases. The pupils and midwives were forbidden to wash the genitalia of puerperal women, but the latter were compelled to perform their own ablutions. All the instruments and apparatus in the lying-in ward were either destroyed or subjected to a white heat. Each patient was provided with her own catheter and injection tube. The temperatures were taken in the axilla in place of the vagina. The ulcerations about the vulva and vagina were touched with the liq. fer. perchlorid. This duty was performed by Winckel himself.

"As a result of the enforcement of these rules, from the 16th of January to the 7th of July, out of 510 births there were but 3 deaths. But of these three one was due to rupture of the uterus, one to nephritis, and one only, or 0.2 per cent., took place from metria, a result scarcely possible in a similar number of confinements among the poorer classes in their homes."

These facts and others which I have quoted are extremely significant, and need little from me in the way of comment. It will be observed that I have dealt only with well established clinical facts. Concerning the germ theory of Pasteur, the doctrine of microscopic fungi and algae, the micrococcic, the bacterian and coccoglian hypotheses, together with the proto-mycetian ghoul—concerning all these I have held my peace. Not that these various ingenious theories do not possess a transcendental sweetness for the scientific mind, but because there are those who disbelieve them. But however we may dispute in regard to the genesis of sepsis, the clinical facts which I have adduced conclusively prove certain propositions.

First.—Theoretically and in the vast majority of cases *de facto* sepsis can be prevented by an absolute and comprehensive attention to the laws of cleanliness.

Second.—Given that sepsis has occurred in a given case, absolute cleanliness will prevent its extension to other cases, and will stamp it out. Cleanliness is then the lost art which we are to restore to surgery. The success of Mr. Lister with his so called antiseptic method is known the world over. But all observers agree that Mr. Lister's method, independent of carbolic acid, involves an attention to the details of cleanliness almost miraculous, and his results correspond. In fact, Mr. Lister's method has been adopted by others with a substitution of pure water in the place of carbolic acid, and again God-given cleanliness has won the crown. I think then I am justified in saying that sepsis in a hospital is a crime. And as one bad man in a neighborhood may infect many others, so a little leaven of sepsis in a ward will soon leaven the whole lump. And as the statute law demands the execution of the criminal, so the sanitary law demands the destruction of the septic poison. The statute law is designed and undoubtedly does repress crime, and so sanitary law is especially valuable in the way of prophylaxis.

An observance of all the laws of absolute cleanliness about wounds is the great prophylactic against sepsis. Carbolic acid, used in a weak form freely, certainly possesses a remarkable power in preventing putrefactive changes, but putrefaction once having occurred, it is far inferior to permanganate of potash, the chlorinated washes, and other agents, which by rapid chemical changes, immediately destroy both poison and odor.

Sanitarians have been disappointed that hitherto the thorough disinfection of wards and beds has not stayed the fatal course of sepsis. But these gentlemen have overlooked the fact that such disinfection is only one product among many that go to make up the sum of absolute cleanliness. This, together with thorough disinfection of nurses, internes, surgeons, and all appliances about the patient, form a chain which is worthless if one link is missing. I esteem the disinfection of wards and beds of the utmost importance, but they are useless if all other details of cleanliness are not enforced at the same time.

Dr. Doremus disinfected all the wards at Bellevue with chlorine, but, aside from the Third Surgical Division, I cannot learn that any extraordinary precautions with reference to cleanliness were at the same time enjoined. I have verbally interrogated the distinguished surgeons who are serving at present on the other divisions as to whether the mortality has been greater or less than before the disinfection. Without reference to the written records of the hospital, these gentlemen have given me their general impressions. Dr. Sands says he thinks the mortality has on the whole been less, although he is not certain, as there have been as many cases of as grave a type as before. Dr. Mason makes essentially the same statement as Dr. Sands. Dr. Hamilton does not admit that his wards have ever been infected, and has observed no material changes in the mortality of his cases.

These statements are of comparatively negative value, for the most intelligent experience goes to show that clean wards and clean beds, desirable as they are, are not alone sufficient to insure the best surgical results. We are beginning to learn that "evil communications" corrupt good surgery. Every possible channel of conveyance from one wound to another must be hermetically sealed, or "original sin" will certainly crop out.

In the early part of this paper I referred to my own most satisfactory results in connection with a pavilion hospital, and the advocates of this form of hospital claim that it should take the place of large hospitals. I admit that the pavilion is inexpensive, is isolated, can be destroyed when infected, and gives excellent results. Now I suspect that these results are largely due to the fact that a single ward building is more likely to be kept absolutely clean than a great hospital, just as a single room shanty can be kept thoroughly clean much easier than a palace. But when the advocates of the pavilion plan assert that great metropolitan hospitals must inevitably in time become charged with the poison of pyemia and septicemia, beyond the possibility of relief, save by fire or tearing down the structure, they take a position which the facts cited in this paper show to be false.

I do not hesitate to affirm that any old infected hospital can be entirely disinfected, that there can be no crevice or interstice in such a structure in which septic poison lurks which may not be dislodged and destroyed by being brought in contact with a suitable chemical agent. To generate chlorine in saucers in such wards, or simply to hang up napkins wet in disinfectants, is about as efficient as the Pope's bull against the comet. But if chlorine is generated on the scale practiced by Dr. Doremus at Bellevue, in wards tightly closed for some days, the immense volume of gas and its expansive force will cause it to permeate every crack and crevice beyond the limits of any poison lodged therein. When we come to the disinfection of wards we want not a shower, but a deluge.

But if this lost art of cleanliness is to be restored, how is it to be accomplished? The moral accountability for the disastrous results likely to follow the want of cleanly precautions in wards, seems to me to rest on the surgeon himself. It is for him, reverently realizing the functions of his high office, to point out the way. To accomplish the desired end, the exact duties in this regard, of surgeons, internes and nurses should be definitely enjoined. The surgeon should then hold his interne to a rigid daily accountability, and he in turn should narrowly watch the nurses. All causes for complaint of neglected duties to be instantly reported to the surgeon, and if not within his province to correct, to be reported by him to the hospital authorities. These details have seemed to me so absolutely essential, that I think they should be printed on cards which should be nailed on every door in the wards, and a copy furnished to every attendant connected with the ward for his instruction and guidance. As, however, the sum of these regulations has been expressed, I shall not weary the Society with them, simply adding that I have divided them into four sections.

First.—Regulations to be observed by all persons in common having any official connection with the ward.

Second.—Regulations for the guidance of internes.

Third.—Regulations for the guidance of nurses.

Fourth.—Regulations with reference to general cleanliness designed for the head of the hospital.

And so finally we have reaffirmed the adage that "cleanliness is next to Godliness," and this, too, in the largest and best sense is *health.*

FIBROUS TUMOR OF THE UTERUS EXPELLED PIECEMEAL BY ERGOT.

BY
WILLIAM H. BYFORD, M. D.,
Professor of Obstetrics and Diseases of Women and Children in the Chicago Medical College.

Mrs. L. D. M., forty-seven years of age, called on me Sept. 20th, 1876, with the following history. She had been the subject of severe hemorrhage, leucorrhea, pains in the region of the uterus, and general nervous prostration for the past two or three years.

I found upon examination a large fibrous tumor of the uterus, which extended to within two inches of the umbilicus, filling up the hypogastric region, and extending to the ilium on the left side. The uterine cavity admitted the sound fully five inches. The contour of the tumor was globose and regular, and admitted of considerable motion. Her great apprehension made the patient urgently demand some energetic measure to get rid of the tumor. I thought it another very favorable case upon which to try the expulsive influence of ergot, and prescribed Squibb's fluid extract.

She began at once to take 30 drops of that preparation, three times a day, and was to gradually increase the dose to one drachm. At first it had no perceptible effect. In a few days, however, she experienced great pains, and soon the suffering from them made it necessary to omit the medicine for several days at a time. In spite of this disagreeable effect, she was urged to resume it in the smaller doses, and again increase it until it became intolerable. She courageously continued the medicine in this way until the 13th of January, 1877, when the tumor began to break up and be discharged.

I will here give a copy of the letter in which this plucky woman describes the process by which she was freed from the tumor. She says:

"I think I wrote you one week ago to day (Jan. 20th). At that time the tumor was passing. It continued to do so until Friday (the 26th of Jan.), when I think the last of it was expelled. To day I have expressed to you a portion of the last that came. I think the whole that came with the portion I sent you would weigh one and a half pounds. I do not believe a two quart can would hold it all if the whole of it had been preserved. It commenced to come a week ago last Saturday (Jan. 13th), and from Saturday evening to Sunday morning there was a pint or more. After this the stench was so disagreeable that we could not cleanse it; consequently, we threw it away. Wednesday and Thursday it seemed to be in one continuous mass. I can't better describe it than to say that it came like sausage meat from a stuffer. I would cut off about four inches a day; that is on Wednesday and Thursday. Friday morning (the 26th of Jan.) the last portion of it came away. There is now considerable discharge and a good deal of pain, and my appetite is poor.

"During my sufferings I could not take the medicine you prescribed; the valerian makes me so sick. Yesterday morning I had another attack. It took me all at once. It appeared to be in the womb at first, and from there it extended to the bowels, as though a knife were cutting me. During the night, if I would cough or move in my sleep, I could not help screaming, there would be such lancinating pains. I am so tender this morning I can't bear anything to touch me.

"I am afraid of this bowel difficulty. I know it is gas, but do not know how to get rid of it. I attempted to use injections of castile soap and tepid water, to cleanse, but it caused pain. The os or neck of the womb is very sensitive. Saturday morning my bowels [the abdominal muscles] were drawn down tight to my back-bone, but Sunday and to day I am bloated, owing to this gas. There are times I have a little fever, then again I sweat excessively."

In the few last sentences of this letter we see allusion to symptoms that must have arisen from septicemia, the result no doubt of absorption of some of the putrid fluids flowing from the decomposed tumor while occupying the uterus and vagina.

The above description, although not elegant, is very graphic, and the more interesting because it comes from the suffering patient.

In a letter dated March 29th, 1877, she says. "You remember when I last wrote I was menstruating freely, and had been for a week. I took the ergot as you directed, and it checked up. In five weeks my courses returned, lasting only two days. During the interval there has been some discharge of a white, glairy mucous. I have gained flesh, appetite is excellent, and my friends think I am doing splendidly."

The frequency with which the persistent use of ergot is followed by the disintegration and expulsion of fibrous tumors of the uterus, is an interesting if not a new item in the treatment of these morbid growths. In a certain class of these tumors we may reasonably expect this event. This is the fourth case that has come under my observation within the last three years in which a fibrous tumor has been thus summarily disposed of.

In the intramural tumor, where the neoplasm is situated so that the greater portion of the muscular fibres surrounding it lies outside, the persistent use of ergot, if it causes contraction, will be very likely to effect its expulsion. I think the process may be explained in this way, viz.: When all the fibres of the uterus are acting with equal energy, the thicker and stronger external stratum will overcome the thinner and weaker internal layer of fibres, and press the tumor toward the uterine cavity. The frequent and continued repetition of this antagonism must soon impair the nutrition of the overpowered and yielding fibres, and finally destroy their integrity, causing either absorption or destructive inflammation in them, either of which will sooner or later permit of their rupture. After this much is accomplished, the expulsion of the mass will necessarily follow.

I would further call attention to the fact that the concentric action of the whole fibrous structure of the uterus is the most efficient, if not the only factor in the process of disintegration and expulsion of the tumor.

A question of some importance is the possible disastrous effects of ergot in cases where the tumor is situated nearer the peritoneum than to the mucous membrane. If the thicker and stronger stratum of fibres is between the uterine cavity and the tumor, why may not the tumor be disintegrated, and, after rupture of the peritoneal layer of fibres, be impelled into the peritoneal cavity, and cause death from septic inflammation in that cavity? The answer is, that after the tumor is extruded to a certain extent, the inner fibres, by virtue of the concentric direction of their contractions, exert their force from, instead of toward, the tumor. In this way the nutrition of the tumor is diminished, its growth checked, and a tendency given to the more gradual degeneration which results in induration, and, perhaps, calcareous degeneration.

I see no reason to doubt that, with a proper consideration of each case as it presents itself for examination and treatment, we shall generally be able in the near future to select with considerable accuracy those in which the success of the treatment instituted to cause the destruction and discharge of these tumors can be predicted with a reasonable degree of assurance.

A CASE OF SALIVARY CALCULUS.

BY

RUDOLF TAUSZKY, M. D., NEW YORK.

Mary S. 38 years of age, unmarried, presented herself at my office, complaining that, on account of a swelling under her tongue, which has been growing larger for a year, she had considerable difficulty in mastication and speech, besides being annoyed by a constant flow of saliva. She first noticed her trouble about 18 months ago, but paid no particular attention to it up to the time it commenced to grow larger. The patient had always enjoyed good health, with the exception that at times she was constipated and her appetite was poor. Upon examination I found a tumor, of the size of a chestnut, occupying the left sublingual space on the floor of the mouth, not connected with the frenulum linguae, covered by mucous membrane, to which it was not adherent; neither was it attached to the underlying tissues. Its consistency was tense and hard, and, when moved, gave her no pain. It was evident that I had to deal with a cyst filled with some consolidated material, proved to be such by its hardness, the treatment of which could be effected only by removing the imbedded mass by the knife or scissors, and causing the cyst walls to be obliterated by adhesive inflammation, or by removing the cyst with its contents.

With the kind assistance of my friend, Dr. Goodwillie, of this city, who took a wax cast of the tumor before the operation, I made a longitudinal incision through the covering mucous membrane and the cyst wall, and, by the aid of the forceps, removed a calculus of the size above mentioned. The cavity I filled with lint, soaked in a one per cent. solution of carbolic acid, and sent the patient home. The dressing was renewed in a few days, and left until a slight inflammation ensued, when it was entirely removed, and the wound allowed to heal from the bottom by granulation. During the few days intervening between the operation and the closing up of the wound, a weak solution of permanganate of potash was used as a mouth wash every hour or two, and the bowels were kept open by a mild laxative. The concretion which was removed proved upon examination to have been composed of phosphate of lime.

As neither Dr. Goodwillie nor I had ever seen any similar case, either in our own practice or in that of others, I inquired of some of my professional friends whether they had met with a similar affection, and all of them but one stated to me that they had never seen one. Dr. Charles Heitzmann, of this city, had never met with a similar case. Dr. J. Solis Cohen, of Philadelphia, to whom I mentioned it, had a similar experience. I looked up Erichsen's Treatise on Surgery, and found not a word about it. Several other gentlemen, who had seen a number of ranulæ, had never found a similar calcareous concretion. It is the rarity of the occurrence of the affection herein referred to which induced me to publish it. Dr. Clinton Wagner related to me two similar cases. One he saw in Dr. Prosser James' clinic in London, (the concrement was exhibited to the London Medical Society), the other occurred in his practice while surgeon in the United States Army, and is published in *Circular No. 3, War Department, Surgeon General's Office, Washington, D. C., Aug. 11, 1871, page 246.* Dr. Wagner says: "I transmit a salivary calculus, which I hope will be, on account of its extraordinary size, an acceptable offering to the collections of the Army Medical Museum. I removed the stone in Dec., 1870, from the sublingual gland of a laboring man. It blocked up the orifice of the duct of

Bartholini at its junction with the Whartonian duct. From the man's statement I inferred that the concretion had been about three years in forming. . . . . The powder scraped off did not effervesce with hydrochloric acid. With solution of molybdate of ammonia it gave the characteristic reaction of phosphoric acid, and a white precipitate with oxalate of ammonia. The concretion would seem to be composed mainly of phosphate of lime and of organic matter."

The best description of salivary calculi may be found in Fairlie Clarke's excellent treatise on the Diseases of the Tongue, London, 1872.

Prof. Hyrtl, in his "Handbuch der Topographischen Anatomie, Wien, 1865," says: "If the occurrence of bursæ mucosæ under the tongue, described by Fleischmann, and recently by Patri, should prove to be a normal and constant one"—then there can be no doubt today about the seat of the so called ranula. To seek its origin in an occlusion of the duct of Wharton is so opposed to all our experience that it must be abandoned as untenable. At first sight we could assign no plausible reason why it should not thus originate. The so called dacryo cysto-blennostasis proves its possibility. But chemical investigations have shown that the contents of a ranula are *not* saliva, but consist of a more or less viscid, albumen-like fluid, and the knife of the anatomist has found, where a ranula existed, also a healthy salivary duct. The same treatment which is successful for the cure of cysts, namely, extirpation and cauterization, proved to be the best adapted for the complete cure of ranula.

A ranula may become so large that it presses the tongue up and back, and produces attacks of suffocation. Allan Burns relates a similar case. A man who suffered from a tumor of the tongue went to the office of Dr. Cline and waited in his reception room. Suddenly the surgeon heard the noise of a fall and a dull moaning. He ran out to ascertain the cause, and found the patient lying on the floor almost suffocated. Thinking the man had a foreign body in his larynx, he at once proceeded to perform tracheotomy, but noticed however in time that the patient's tongue was pressed backwards by a ranula, which at the same time produced a large prominence under the chin. He quickly opened the tumor, and discharged therefrom a considerable quantity of pus and lymph.

Salivary calculi in Wharton's duct consists almost exclusively of pure phosphate of lime. Nicod saw one ½ inch long and 3 lines breadth. The case herein reported by me furnished an example of a much larger stony concrement than that of Nicod.

162 West 34th Street.

FATAL CELLULITIS FOLLOWING THE USE OF THE ELASTIC BANDAGE.

BY

STEPHEN SMITH, M. D.,

Surgeon to Bellevue Hospital, New York.

A German, æt. 25, entered the hospital for treatment of necrosis of the humerus. He gave the history of an attack of acute periostitis, terminating in suppuration and the formation of sinuses.

On exploring through these openings cloacæ were found, and within the involucrum loose fragments of necrosed bone were detected. There were two principal sinuses, one on the external part of the arm at the junction of the upper and middle third, and the other on the internal surface two inches above the flexure of the elbow. The patient was in excellent health, of stout build, and actively employed.

While the anæsthetic was being administered, the elastic bandage was applied from the fingers to a point just above the upper opening. As there appeared to be no purulent infiltration of the soft tissues, the limb having the general tonicity of health, the bandage was applied with equal firmness over the diseased portion of the limb.

The operation was quickly over, the dead bone being readily removed, and a free passage established between the upper and lower openings. This channel was thoroughly washed out with syringefuls of carbolized water, and antiseptic dressings applied.

On the following day there were signs of a local inflammation on the external part of the arm, just above the line made by the bandages. An abscess formed at that point, which was finally opened, and discharged a quantity of fetid pus. Before it was opened, however, there were evidences of a commencing cellulitis, taking its departure from this abscess as a centre. This cellulitis spread rapidly over the shoulder, neck, and anterior portion of the thorax, with high bodily temperature and rapid pulse. Areas of cellulitis also developed over the hip and leg. Pleurisy soon after appeared, attended with dyspnœa and great prostration. Irregular chills followed, with clammy perspiration, a sallow skin, and all the evidences of acute pyemia. Death took place on the twelfth day from the operation.

The autopsy proved the extension of the cellulitis from the abscess of the arm over the thorax and to the pleura; but the swelling and infiltration of the arm in the vicinity of the abscess, and wounds of operation, made it impossible to trace the undoubted connection between them.

The infiltrated cellular tissue was very offensive; the pleura was covered with shreds of decomposing membrane, and the cavity contained seropurulent fluid. Neither the lungs, brain, nor liver were involved.

In the use of the elastic bandage in operations for necrosed bone, where it is so useful by giving a bloodless wound, I have always been careful to apply over the infiltrated tissues a layer of soft and yielding material—as cotton wool—to prevent the possibility of forcing any septic matters into uninjured cellular tissue beyond the wound. But in this case there seemed to be no unusual succulence of the tissue, and the bandage was applied with ordinary tension over the diseased structures.

It would, perhaps, be more wise to follow the eminently conservative method of procedure laid down by Prof. Esmarch, who introduced this plan of securing bloodless operations. He says: "If you are operating upon parts infiltrated with ichorous matter, you must refrain from emptying them completely of their blood. If you bandaged such soft parts tightly, you would be in danger of driving the infectious matter into the meshes of the cellular tissue and extremities of the lymphatic vessels, and might possibly do much harm thereby. In such cases I do not put on the bandage at all, but content myself, before applying the tubing, with emptying the limb as completely as possible of blood, by causing it to be raised high in the air for a few moments."

NEW YORK, 57 W. 42ND STREET.

HOSPITAL RECORDS.

ROOSEVELT HOSPITAL, NEW YORK.

REPORTED BY G. E. TWISS, M. D.

EXSECTION OF KNEE-JOINT:—SERVICE OF DR. ERSKINE MASON.

P. J. C., æt. 19, admitted to hospital March 15, 1877. Patient's family history good. He was perfectly healthy till he was eight years old, when one morning on getting out of bed he found his left knee stiff and painful. The joint became much swollen, and for two years he was unable to use it. About this time a hard swelling appeared on the outer side of the knee. It was painful for a time, and then passed away. After that he could use the joint, though it was stiff. About five years ago the outer surface of the joint became inflamed, and this time increased in size, broke and discharged pus on the outer surface of the leg, 1½ inches below head of fibula. The opening closed soon after. Up to one year ago he used the limb, but it was a little stiff. At that time an abscess formed without known cause on the front of the knee, just below the patella. It broke and discharged pus, and has remained open ever since, the material coming from it being thin, watery, and almost inodorous. During the latter part of last November patient was exposed to cold, and the knee became very sore and discharged pus through the old sinus. It soon subsided to its former condition. In December he was examined by a doctor, who told him that there was "dead bone in the joint."

On admission patient presents arthritis of left knee; the whole limb is somewhat smaller than right. Circumference: Middle of thigh, right, 17¾ inches; left, 13½ inches. Middle of leg, right, 12 inches; left, 10½ inches. The left knee is much larger than right. Circumference at top of patella: right, 13 ⅛ inches; left, 13⅝ inches. Circumference at middle of patella: right, 13¼ inches; left, 14⅛ inches. There is a sinus opening 1½ inches below lower border of patella.

March 20th.—Patient, under ether, examined by Dr. Mason. The head of tibia is shifted backward and inward, and is rotated on the long axis of the bone, so that the foot is somewhat everted. The leg cannot be completely extended, and flexion is limited to about 15°. A probe being introduced into the sinus and passed backward touches dead bone, apparently the head of the tibia. Pushed more in and upwards it touches the articular surface of the femur. There is a sinus running more superficially in an upward direction, and the point of the probe can be felt at the upper and inner side of the patella. The probe can also be felt, when pushed outward, to point beneath the skin just in front of the tendon of the biceps muscle. When pushed inwards it appears on the inner aspect of the joint, diametrically opposite to the former. The finger being pushed into the sinus comes in contact with the rough head of the tibia and the under surface of the femur; this, as well as the sinus, being covered with a soft friable material like granulation tissue. The posterior surface of the patella can be felt, the movements of that bone being somewhat restricted. Joint cavity washed out with sol. acid salicyl. and cloth wet in lot. plumb. et opii applied.

March 22d.—Very little disturbance resulted from the examination.

March 24th.—Patient under ether. Esmarch's bandage having been applied, a tranverse elliptical incision was made across the head of the tibia, through the old opening, for the purpose of exploring the sinus and discovering the condition of the joint. The lower flap was then dissected from the bone and pulled downward, when it was found that there was an abscess in the head of tibia, opening externally a little to right of median line, and opening into the joint. After consultation it was decided to exsect. The first incision was enlarged on either side, and the anterior and lateral ligaments divided, the leg being strongly flexed on thigh. The joint being thus opened, it was discovered that the internal condyle of the femur was also diseased. The crucial ligaments and semilunar cartilages had been destroyed. The tissues were then dissected from the head of the tibia, and a portion of that bone removed by sawing from behind forwards. A wedge-shaped piece of bone was thus removed, the thickest portion being anterior. There was an opening in the cut surface of the tibia leading into a carious track about $\frac{1}{3}$ of an inch in width in the centre of the bone. This was removed with a gouged bone scraper. The tissues were then dissected and depressed from the condyles, and their transverse section was sawn from the femur, the artery being guarded with a retractor. A soft, carious spot was found on the sawn surface of the internal condyle, a little external to its centre, which was removed with a bone scraper. The patella was then dissected from the surrounding tissues and taken out. Esmarch's bandage was then removed. Hemorrhage slight, no ligatures or torsion being required. Wound irrigated with sol. acid salicyl. 1-150. The cut bone surfaces were then brought into opposition, and wired together with silver-plated copper wire. These were twisted and brought out on either side. The skin flaps were brought together and held in position by silk sutures. A plaster of Paris splint was then applied, strengthened behind by a wooden splint, and laterally by iron brackets, to which the wires were fastened. The knee was then tightly bandaged with crinoline. 6 p. m.: pulse, 108; temp., 99. Recovered from ether. Has much pain in knee. Considerable oozing of blood from the wound. Packed lint applied, and knee snugly bandaged with ordinary bandage.

March 25th.—9 a. m.: pulse, 120; temperature, 99½. Some discharge of pus; otherwise quiet. Dressed as before. 6 p. m.: pulse, 132; temperature, 102 1-5°.

March 26th.—Slight œdema round wound. Irrigation with sol. acid salicyl, 1-200. Mosquito netting bandage applied. A moderate amount of healthy pus discharged. 9 a. m.: pulse, 124; temperature, 100 2-5°. 6 p. m.: pulse, 140; temperature, 102°.

March 27th.—Patient complains of headache and nausea. Appetite poor. Bowels moved freely. Does not sleep well. Free discharge from wound. Some swelling and œdema still. Has sharp, starting pain in the knee. Pressure applied by means of straps of adhesive plaster, and bandage of mosquito netting applied. Given daily spirits frument, 3 oz. 9 a. m.: pulse, 140; temperature, 102 1-5°. 6 p. m.: pulse, 142; temperature, 103°.

March 28th.—Doing well. Slept pretty well last night. Sutures have all been removed, and the flaps have united in several places. Pressure kept up, and cloth wet in sol. acid salicyl. laid over joint. Pulse, 148; temperature, 104¾°. Pulse, 146; temperature, 103°.

March 29th.—Less pain in the part. Patient feeling stronger. A. M.: pulse, 152; temperature, 101 3-4. P. M.: pulse, 140; temperature, 103 1-5°.

March 30th.—Was delirious last night. Knee painful this morning, though it looks well. Ord. opium, gr. ¼, every three hours. A. M.: pulse, 136; temperature, 102½°. P. M.: pulse, 140; temp., 102°.

March 31st.—Patient slept well last night. Appetite good. Discharge abundant and healthy. Swelling much decreased.

April 3d.—Doing well. Discharge healthy and decreased in amount. A. M.: pulse, 124; temperature, 99½°. P. M.: pulse, 150; temperature, 103°.

April 4th.—Knee doing well. Patient complains of cough; had a chill last night. Examined by Dr. Mason, who found pneumonia of lower lobe of right lung.

April 5th.—Ordered spirits æth. nitr. a drachm every three hours; dry cups to right side of chest. 9 a. m.: pulse, 150; temperature, 101°. 6 p. m.: patient suffering from dyspnœa. Ordered ammon. carb., 1 dr.; spts. vini gal., 1 oz.; spts. æther nitr., 1 oz.; mucilage, ½ oz.; aq. ad., 4 oz. S. Half a tablespoonful every 3 hours. Pulse, 148; temp., 103½°.

April 6th.—Patient sinking, and delirious most of the time; when conscious suffers from dyspnœa.

April 7th.—12.45 a. m. patient died.

◆

BELLEVUE HOSPITAL, NEW YORK.

OSTEO SARCOMA OF ILIUM—REMOVAL OF A PORTION OF THE TUMOR BY THE GALVANO CAUTERY.—SERVICE OF DR. STEPHEN SMITH.

Mary Downes, æt. 16, single, native of U. S., admitted March 21st, 1877, of full habit of body. In March of last year, while passing a table, she struck the left anterior iliac region against the corner. After the accident she limped when walking, and had pain just below the anterior left superior spine of the ilium. About three weeks afterward she noticed a swelling directly at this point, which gradually increased in size. The pain was of a lancinating character from the first, and was more severe at night, sometimes extending as far down as the knee. About four weeks ago an opening was made into the centre of the mass, where fluctuation had been detected, and quite a large quantity of bloody pus was discharged. This, however, did not relieve the pain. Two days after the incision was made a fungous-looking mass, about the size of an egg, made its appearance, accompanied by severe pain. This mass has grown rapidly, and now has a mushroom appearance. On examination there is found to be a circle of hardness about the excresence, extending three or four inches down the anterior part of the thigh, as far backward as the trochanter, and seeming to fill up the left iliac fossa. The fungous growth is directly over the left superior spinous process of the ilium.

April 5th.—The fungous-looking mass has grown very rapidly, and is now half as large again as when she came in. It discharges considerably more than at that time, through an opening in the centre of the protruding mass. The pain is more severe, especially at night, and she has frequently to take morphia to quiet it. The pain is mostly deep-seated; sometimes, however, it is situated in the protruding mass, when iodoform sprinkled over it gives great relief. The circle of hardness is increasing. Her bowels are somewhat costive, and movements cause sharp pain in the tumor. Her appetite is good, and she takes stimulants quite freely. The pulse is quite frequent, being over 100; and her temperature, in the morning, about 99½°; in the evening, 101° or 102°. She now has night sweats, for which she was given ext. belladonna, gr. ¼, t. i. d. A portion of the protruding growth was sliced off without giving her any pain. Hemorrhage was arrested by liq. ferri persulph. This specimen was examined microscopically by Dr. Heitzman, who pronounced it to be of the most malignant form of osteo-sarcoma.

April 16th.—Urine examined today. Specific gravity, 1020; neutral, and contains no albumen.

April 19th.—The fungous-like protruding part of the tumor has given great annoyance and uneasiness, from its contact with the bed clothes, and preventing all movements and changes of position of the body. It now measures 27 cm. (10¾ inches) around the pedicle, and 36 cm. (14¼ inches) around its largest part, and is growing rapidly, and it was thought advisable to remove it.

To avoid the risk of severe hemorrhage, the tumor being exceedingly vascular, it was concluded to use the galvano-cautery wire. Accordingly Dr. Piffard, of this city, was invited to operate, using for the purpose his battery. About ten or eleven inches of wire were required to surround the neck of the mass, and the operation lasted forty minutes During the operation there was a slight amount of hemorrhage, controlled in part by chloride zinc and pressure. Upon removal of the mass no bleeding points were found. The portion removed weighed 19½ oz. Av. A sponge soaked in persulphate of iron was firmly bandaged over the part. The pain was considerable after the effects of the chloroform passed off, and liq. morph., U. S. P., two drachms, was ordered, with a drachm afterwards as needed.

April 20th.—Temperature about the same as before the operation, being, P. M., 100°; A. M., 99°. She passed a much more comfortable night last night than for a long time. The wound was today dressed with lint soaked in carbolic acid solution, 1 part to 60.

April 23d.—The fungous mass has again begun to protrude underneath the eschar, at its lower edge. It is already nearly an inch high, and of conical shape. The mass seems to be rapidly involving the deeper tissues, and the enlarged veins are very prominent over its surface. Patient very comfortable.

April 24th.—The anhydrous sulphate of zinc was applied to the mass, and iodoform afterward sprinkled over the surface. The patient is much weaker; pulse, 140; temperature, 100°.

April 30th.—The mass has continued to increase in size. There is now some œdema of the leg. The pain is increasing, and is of a most severe character in the hip and knee, although it is felt the whole length of the leg. The integument around the mass is red and inflamed. Temperature, 100° to 102°. Patient is sinking quite rapidly, and the termination is not far distant.

REMARKS.—The operation in this case was performed with a view to afford temporary relief and promote the comfort of the patient, which, in a measure, it did. The microscopical examination had shown that permanent benefit was not to be hoped for.

BIBLIOGRAPHY.

ANALYTICAL AND CRITICAL REVIEWS.

A Practical Treatise on Diseases of the Skin. By Louis A. Duhring, M. D. Philadelphia. J. B. Lippincott & Co., 1877.

In a very terse and modest preface the author states that his aim has been to write a concise, practical and useful treatise on diseases of the skin, in which the subject was made simple and intelligible. That such a treatise is urgently wanted those best acquainted with the subject will readily attest; for, although we have numerous works of greater or less scope, each one is open to objections, and in one particular, or another fails in being a systematic text book. The time had certainly come when it was necessary for some worker to go carefully and systematically over the whole field of dermatology, and to bring the subject up to its proper level. We know of no one better fitted in all essentials for the task than the author of the present treatise, and at the outset we may express our pleasure at the satisfactory result attained.

As a mark of esteem for his former teacher, Dr. Duhring dedicates his work to Hebra, whose teachings have evidently been of great service to him in the construction of this book. The general arrangement followed reminds the reader of the great work of the German master, whose classification, slightly modified, has been taken as its frame work. The elementary essentials of dermatology are treated of in a very clear, simple and graphic manner. The anatomy of the skin is well described and admirably illustrated after drawings made by Dr. Van Harlingen, whose labors in this and other branches of the subject are worthy of high praise.

We are particularly pleased with the chapter on symptomatology, which will do much to render the study of the subject easy and satisfactory. Each lesion is first defined in an aphoristic form, and then treated of quite fully. The lecture on pathology of the skin is an admirable supplement to that treating of symptoms. Perhaps no clearer indication of the thoroughly practical character of the book can be gained than is offered by the chapter on etiology. Here the author states what he is really warranted in stating by the facts thus far elicited, and does not indulge in any theories. To our mind this is very judicious, for, as a rule, theories should not find a place in a practical text book.

Though containing nothing strikingly noticeable, the sections on diagnosis, treatment and prognosis are very full and clear. Under the head of anomalies, or disorders of secretion, the various affections of the sebaceous follicles are fully described, seborrhœa being treated of excellently and at length. Perhaps if we have any criticism to make in this connection it is that we hardly can go as far as the author does in recognizing certain internal conditions as causing acne. We regard the section upon eczema, which occupies sixty pages, as a most excellent one, constituting to our mind the most satisfactory description as a whole of this disease yet published. No one can read the section without deriving from it great benefit. The various other exudative affections are well described, especially lichen planus and psoriasis.

As the limits of this review do not admit of minute criticism, we shall only briefly allude to the remaining striking features of the book. The sections on hypertrophies and atrophies are very good, while that on new growths is in all respects admirable; as an instance we may mention the section on syphilodermata as being very full, complete in all essentials, and perhaps the best one of its length thus far published. The same praise must be accorded to the section on parasites, which is certainly in all respects admirable, and illustrated by engravings original to this book, made from Nature, being better in every particular than any now in use. These will assist the observer, as they are true to Nature, and not objects of fancy.

Such then are the strong points of this valuable book, which is in all respects fully up to the mark aimed at by the author. We have very few works in medicine as good as this one. Its descriptions are clear and true to Nature, while the directions it gives for treatment are satisfactory in all respects. There is evidence on every page of hard, conscientious work and deep thought on the part of its writer. The style of writing is terse, clear and to the point. Finally, then, we can recommend this as the very best hand book of skin diseases, certainly in the English language.

The Anatomy of the Head. By Thomas Dwight, M. D. 8 vo., pp. 136. Boston, H. O. Houghton & Co., 1876.

This little work of Dr. Dwight, we feel sure, will be a welcome companion to every student of anatomy, especially in this country, as it covers a field which has been very much neglected, viz., the relation of the several parts to one another. As far as the parts above the hyoid bone are concerned, our author has performed his task in an admirable manner, and his plates of sections of the frozen head are both interesting and valuable. A practical knowledge of anatomy, we believe, is only to be acquired in this way, and we sincerely hope that ere long it will form an important part of the course in all our medical schools. We should be pleased to see Dr. Dwight's little volume followed by another more extensive one on the anatomy of the human body, and should he attempt its production he certainly would meet with the support of the profession. The work before us should be in the library of every surgeon and anatomist.

A Course of Practical Histology. By Edward Albert Schafer. 12 mo., pp. 304. Philadelphia, Henry C. Lea, 1877.

In his preface our author states that "the purpose of this work is to afford those engaged in the practical study of Histology plain and intelligible directions for the suitable preparation of the animal tissues." Can we do more than say that he has accomplished his purpose? After devoting a short chapter to a description of the essential parts of the microscope, and giving general directions for work, the several tissues are treated of under separate headings. No attempt is made to describe them, but merely plain, practical directions for their preparation for examination, and mounting. There has long been a demand for such a work, and it will be welcomed by every student of histology.

SULPHATE OF CINCHONIDIA.

The present high price of SULPHATE OF QUINIA, which seems likely to continue for two or three months to come, will cause more attention to be paid to the other alkaloids of the Cinchonas—particularly in view of their great comparative cheapness.

We learn from reliable sources that in the year 1866, the Madras Government appointed a Medical Commission to test the respective efficacy in the treatment of fever, of Quinia, Quinidia, Cinchonia and Cinchonidia. From the report, it appears that the number of cases of paroxysmal malarious fevers treated was 2472—namely, 836 with Quinia, 664 with Quinidia, 569 with Cinchonia and 403 with Cinchonidia. Of these 2472 cases, 2445 were cured and 27 failed. The difference in remedial value of the four alkaloids may be thus stated—

QUINIDIA---Ratio of	cure per	1000	cases,	994
QUINIA	"	"	"	993
CINCHONIDIA	"	"	"	990
CINCHONIA	"	"	"	977

to which we can add that the article has been tried in this country by upwards of **eighteen thousand physicians**, and that the testimonies we have been daily receiving during the last two years, agree with **remarkable unanimity** in placing this remedy side by side in efficacy with Sulphate of Quinia.

It may be expected that the increasing demand for it will, in the course of time, cause it to approximate more closely in price to Sulphate of Quinia.

The few who might possibly hesitate to use the comparatively new salt of Sulphate of Cinchonidia, have still Sulphate of Quinidia to fall back upon.

POWERS & WEIGHTMAN.

PHILADELPHIA, March, 1877.

Archives of Clinical Surgery.

A MONTHLY PERIODICAL DEVOTED TO SURGERY IN ALL ITS SPECIAL DEPARTMENTS.

EDWARD J. BERMINGHAM, M. D., EDITOR.
BARNARD ELLIS, M. D., ASSOCIATE EDITOR,

The ARCHIVES is issued on the fifteenth day of every month, and contains:

LECTURES: by the representative teachers of the day.

ORIGINAL PAPERS:—This department contains the most valuable series of practical articles ever offered to the medical public. They are written exclusively by men from the foremost rank in the profession, and are characterized by their terseness and originality.

TRANSLATIONS:— of lectures and papers of importance and interest.

PROGRESS OF SURGERY:—Under this heading appear semi-annual reports upon the progress made in the several departments of Surgery. Important discussions, either before societies or in the pages of our contemporaries are dealt with in a thorough manner, by men eminent in the various branches, and the articles in all cases appear over their names. To attest the value of these reports, it is but necessary to refer to the following distinguished collaborators who are engaged in this department:

FRANK P. FOSTER, M. D., (*Surgical Diseases of Women.*) NEWTON M. SHAFFER, M. D., (*Orthopaedic Surgery*), HENRY G. PIFFARD, M. D., (*Dermatology*), ROBERT W. TAYLOR, M. D., (*Genito-Urinary Diseases and Syphilis*), J. EWING MEARS, M. D., (*General Surgery*).

HOSPITAL RECORDS:—A leading feature of the ARCHIVES is a special department devoted to the publication of the interesting surgical cases and operations in the larger hospitals throughout the country. The cases are given in full, with explanatory and critical remarks, thus attaining the dignity of original articles.

CORRESPONDENCE upon matters of moment to contributors.

BIBLIOGRAPHY:—In this department all the later and more important works upon Surgery and its Specialties are critically analyzed by an able corps of impartial reviewers. The notices appear anonymously, and are made solely in the interest of our readers, and not in that of any college, clique, or publishing house.

SUBSCRIPTION RATES

(INCLUDING POSTAGE, AND PAYABLE INVARIABLY IN ADVANCE.)

United States and Canada,	$4.00	Great Britain and Ireland,	18s.
France,	23f.	Germany,	18m.

Volume I, Cloth, price $4.00.

Remittances should be made by draft, postal money order, or registered letter to

RUTLEDGE & CO., PUBLISHERS, 102 W. 49th St., New York.

THE HOSPITAL GAZETTE.

A Monthly Journal of Medicine and Surgery.

EDITED BY FREDERICK A. LYONS, A. M., M. D.

Subscription, One Dollar per Year, Postage Paid.

CONTENTS;

LECTURES, clinical and didactic, delivered at the principal schools and hospitals, and reported expressly for this journal.

ORIGINAL COMMUNICATIONS of practical value to the general practitioner, contributed by the best writers in the profession.

TRANSLATIONS from foreign journals, of important cases and papers.

REPORTS FROM HOSPITALS, carefully prepared by the internes having charge of the cases; and exemplifying the practice of medicine and surgery in our metropolitan institutions.

ABSTRACTS AND REPRINTS of valuable articles, appearing in the pages of our contemporaries.

MISCELLANEOUS ITEMS of general interest.

BIBLIOGRAPHICAL NOTICES of new works and editions.

BIOGRAPHICAL SKETCHES of men of eminence.

Address all communications relating to the editorial department to Dr. Frederick A. Lyons, 102 West 49th Street, New York. Business communications to

RUTLEDGE & CO. Publishers, 102 W. 49th Street, New York.

L. & S. LYONS, Printers, 327 Canal Street, New York.